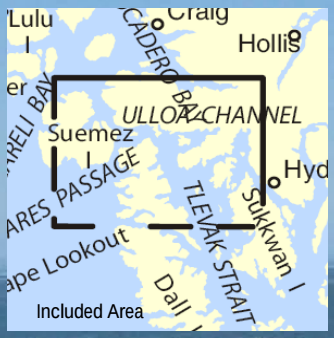
BookletChart™

Northern Part of Tlevak Strait and Ulloa Channel

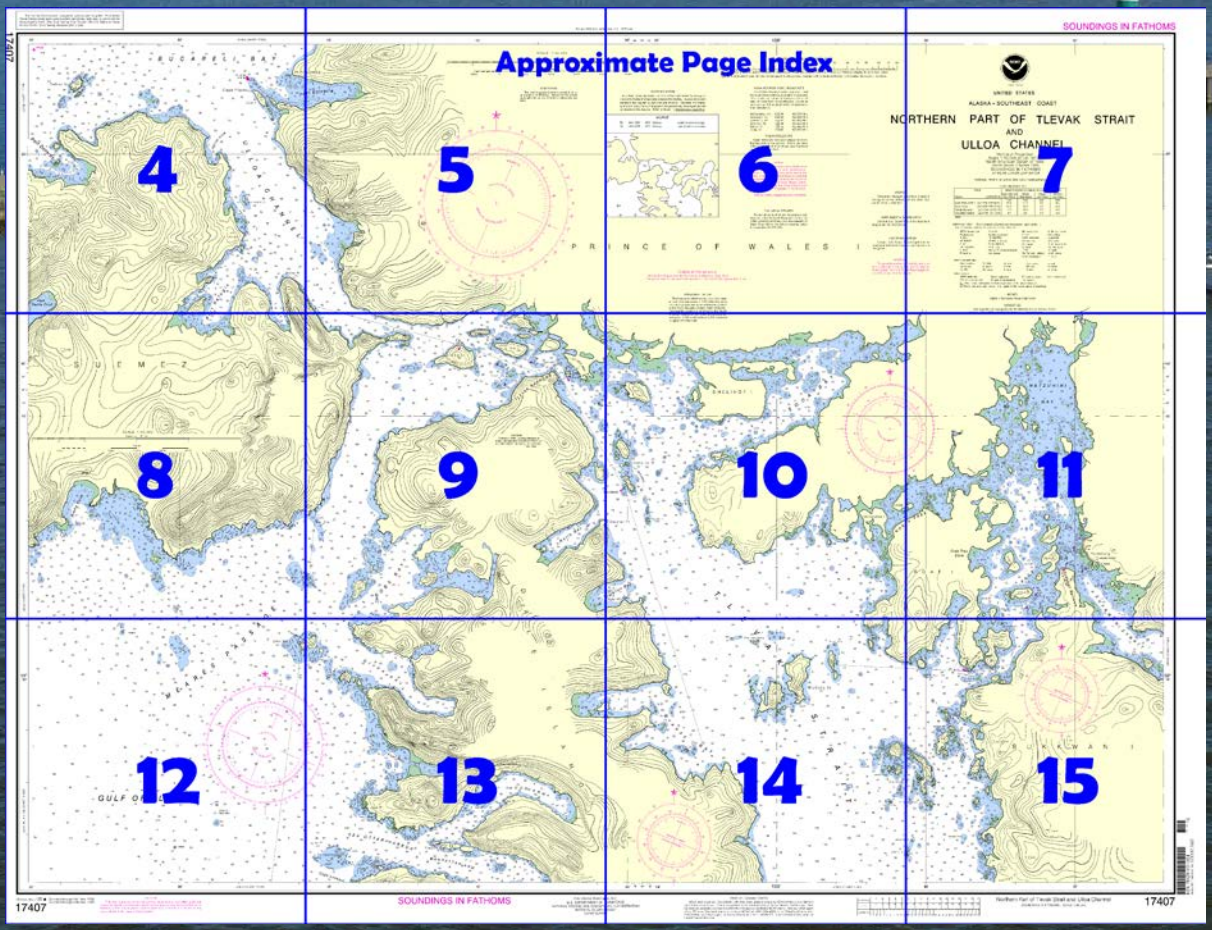
NOAA Chart 17407

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- *Complete, reduced-scale nautical chart*
- *Print at home for free*
- *Convenient size*
- *Up-to-date with Notices to Mariners*
- *Compiled by NOAA's Office of Coast Survey, the nation's chartmaker*



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

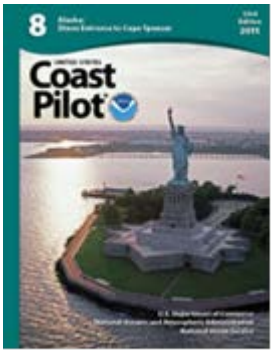
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=17407.



(Selected Excerpts from Coast Pilot)
Foul Bay, immediately N of Juel Point (55°07.6'N., 133°13.6'W.), is about 2.5 miles N of Cape Lookout. In the center of the bay near the entrance is a cluster of submerged rocks. The shores of the bay are foul where the bay narrows; reefs extend from either shore almost to midchannel, leaving a narrow passage 50 to 100 feet wide through which very small boats pass to a secure anchorage in 3 to 5 fathoms near the head of the bay. Only those with local knowledge should enter the bay.

Meares Passage is at the NW end of Dall Island, between it and Suemez Island, and affords passage from the sea to Tlevak Narrows and the E part of Ulloa Channel. The approach to Meares Passage from W is foul in places for about 2 miles from the Suemez Island shore.
Suemez Island, about 8.5 miles in diameter, is W of and separated from the N end of Dall Island by Meares Passage. The island is mountainous; the peaks are generally rounded and wooded, except near the summits. The shoreline is rocky, fringed by small rocky islets and kelp, and indented by numerous bays and inlets.
Currents.–The tidal currents in Meares Passage set NE on the flood and SW on the ebb. The estimated velocity of the current is about 1 to 1.8 knots. S of Meares Island the flood sets E and the ebb W with an average velocity of 2.1 knots. (See the Tidal Current Tables for daily predictions for places in Meares Passage.)
Sukkwan Narrows has a least depth of 2¼ fathoms in a narrow channel with rocky shoals on both sides. The average maximum current is about 1.3 knots and sets NW with the flood and SE with the ebb. The channel is buoyed, and its W entrance is marked by **Sukkwan Narrows Light** (55°12'03"N., 132°50'30"W.), shown from a skeleton tower with a red and white diamond-shaped daymark on the N end of Sukkwan Island. A rock covered 1 fathom is at 55°12'15"N., 132°50'19"W.
Caution.–Vessels drawing 15 feet or more when approaching or leaving Hydaburg Cooperative Pier should avoid the submerged ledge that makes out into the channel from the point close E of pier. The ledge extends about 290 yards S of the pier and has a depth of 16 feet at its outermost end. A pinnacle rock at a depth of 2¼ fathoms is about 350 yards SW of the pier; it is marked by a buoy.
Tlevak Narrows, locally known as **The Skookum Chuck**, is a narrow and comparatively deep passage between Block Island and Turn Point, and connects Tlevak Strait and Ulloa Channel. A 6¾-fathom spot, near midchannel, is about 0.3 mile NW of Block Island Light. A ½-fathom shoal 0.4 mile NW of Turn Point is marked on its S side by a buoy that is reported to tow under during large tides. The channel S of the buoy is the one generally used.
Good anchorage for small craft can be had in 3¼ fathoms, soft bottom, in the small cove on the N side of Tlevak Narrows; the entrance to it is about 0.5 mile N of Turn Point.
Currents in the vicinity of Tlevak Narrows run very strong during large tides; in the narrowest part the velocity is over 4 knots. In the vicinity of Turn Point there is an approximate ninety-degree turn with strong currents, on both the flood and ebb, that swirl and cause whirlpools that can spin a boat around. Caution is advised while transiting this area. Soon after passing through the narrows, the current greatly diminishes in strength; beyond Guide Island and Meares Island it is almost imperceptible.
With the large tides there is very little slack, while with the small tides, slack water lasts from 10 to 30 minutes, and there is not much current for 1 hour on either side. (See the Tidal Current Tables for predicted times and velocities.)
NE of Lively Islands it is reported that the current sets constantly NW, being stronger when the main stream W of the islands is setting NW. To take advantage of this constant set, small craft bound N usually pass NE of the Lively Islands.
The current setting NW divides into two parts off the E end of Ulloa Island. One part sets N of the island, and the other sets with considerable strength into Meares Passage.

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Juneau	Commander 17th CG District Juneau, Alaska	(907) 463-2000

Table of Selected Chart Notes

Corrected through NM Nov. 22/03
Corrected through LNM Nov. 11/03

HEIGHTS

Heights in feet above Mean High Water.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

Mercator Projection
Scale 1:40,000 at Lat. 55°15'
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 8. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.

Refer to charted regulation section numbers.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 1.245" southward and 5.946" westward to agree with this chart.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Mt. McArthur, AK	KZZ-95	162.525 MHz
Sukkwan I, AK	KZZ-89	162.425 MHz
Zarembo I, AK	KZZ-91	162.450 MHz
Gravina I, AK	KZZ-96	162.525 MHz
Duke I, AK	KZZ-92	162.450 MHz
Craig, AK	KXI-80	162.475 MHz

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

VEGETATION

The land is generally heavily wooded up to an elevation of 1500 feet. Above that the woods gradually thin out and the higher elevations are bare.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the U.S. Coast Guard.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

COLREGS, 80.1705 (see note A)
International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

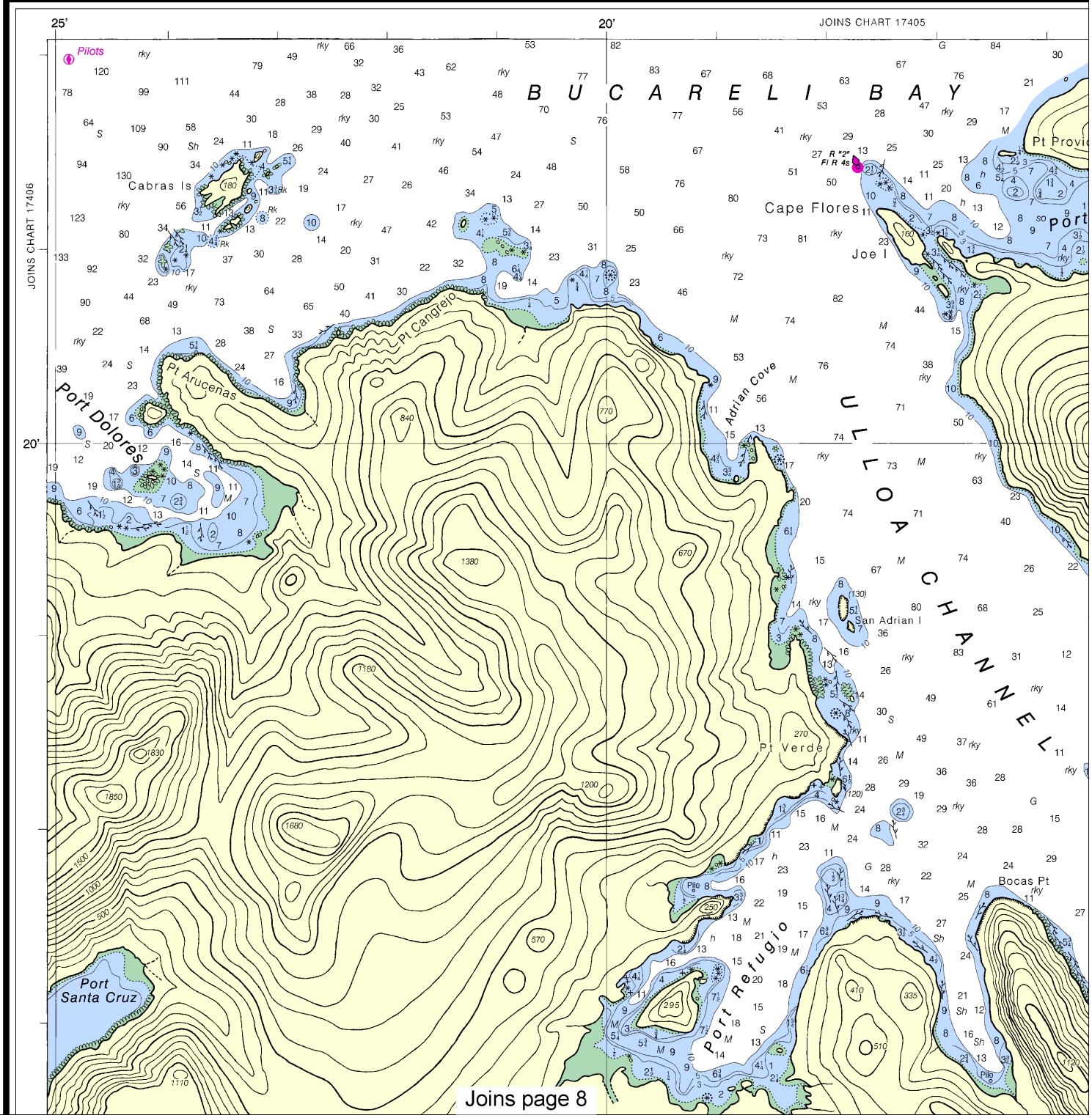
TIDAL INFORMATION

Place Name	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
		feet	feet	feet	feet
North Pass W Ent.	(55°12'N/ 132°56'W)	12.9	12.1	1.4	-4.0
South Pass	(55°10'N/ 132°52'W)	12.9	12.0	1.5	-4.0
Tlevak Narrows	(55°16'N/ 133°07'W)	11.7	10.8	1.5	-4.0
Sea Otter Harbor	(55°07'N/ 133°10'W)	9.7	8.9	1.3	-4.0

(803)

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

17407



Joins page 8

4

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

~~SCALE 1:40,000~~

Nautical Miles

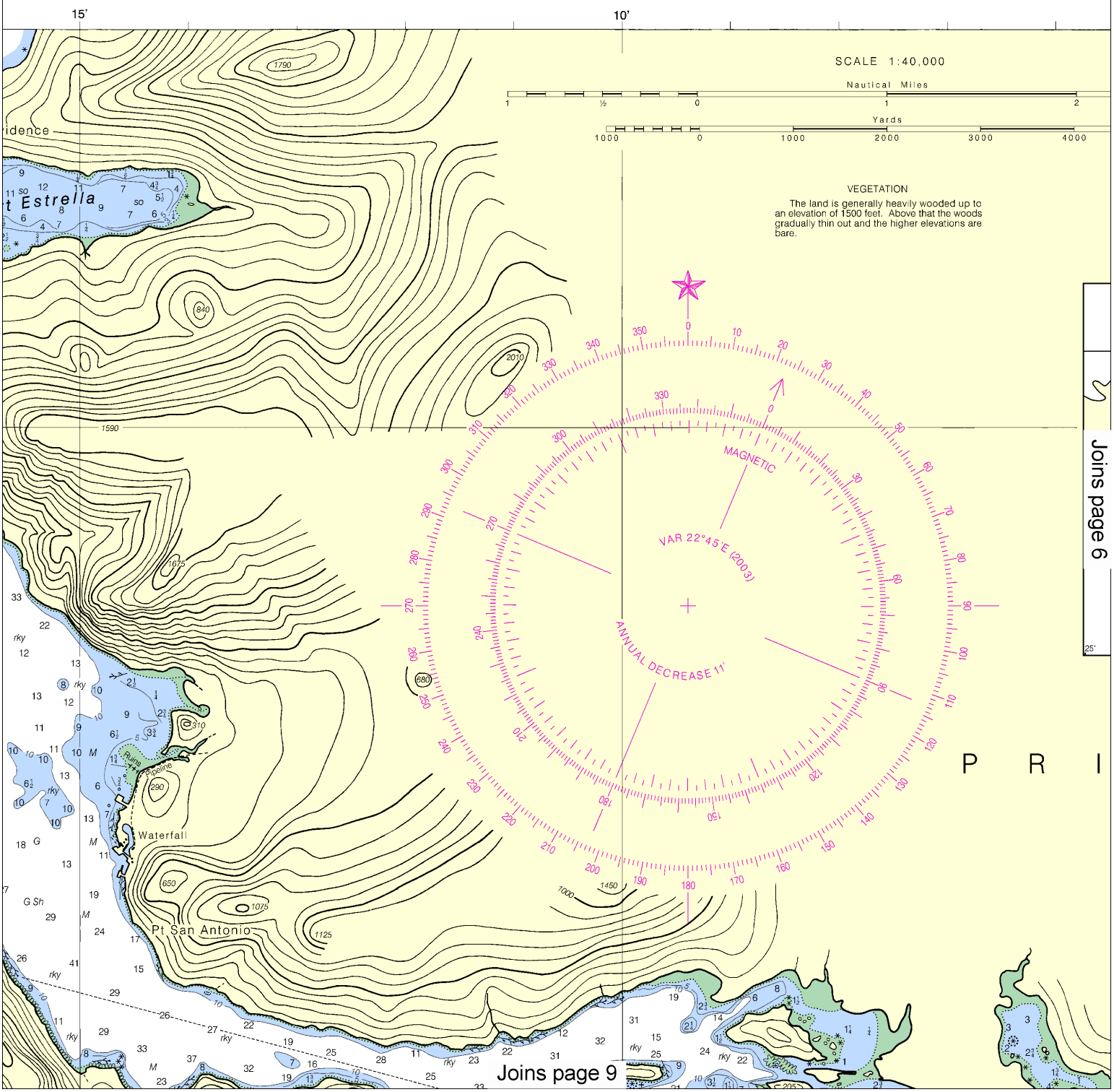
1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

See Note on page 5.

Formerly C&GS 8151, 1st Ed., June



This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:53333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

05' 45" 30" 15" 04'

133°

2 3

4000 5000

LOGARITHMIC SPEED SCALE

1 2 3 4 5 6 7 8 9 10 15 20 25 30 40 50 60

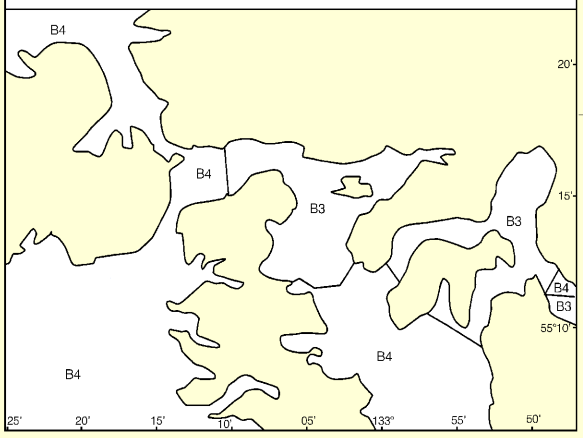
To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE

B3	1940-1969	NOS Surveys	partial bottom coverage
B4	1900-1939	NOS Surveys	partial bottom coverage



NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Mt. McArthur, AK	KZZ-95	162.525 MHz
Sukkwan I, AK	KZZ-89	162.425 MHz
Zarembo I, AK	KZZ-91	162.450 MHz
Gravina I, AK	KZZ-96	162.525 MHz
Duke I, AK	KZZ-92	162.450 MHz
Craig, AK	KXI-80	162.475 MHz

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 8. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.

Refer to charted regulation section numbers.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

Joins page 5

N

CAU

Temporary change navigation are not indic Local Notice to Mariners

SUPPLEMENTA

Consult U.S. Coas supplemental informat

AIDS TO N

Consult U.S. Coas supplemental informat navigation.

WARN

The prudent marine any single aid to navi floating aids. See U.S. and U.S. Coast Pilot fo

I N C E O F W A L E S I

COLREGS, 80.1705 (see note A)

International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 1.245' southward and 5.946' westward to agree with this chart.

Joins page 10

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:40,000~~

See Note on page 5.

Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

SOUNDINGS IN FATHOMS

55’ 50’ 20’

COAST SURVEY

UNITED STATES

ALASKA – SOUTHEAST COAST

ORTHERN PART OF TLEVAK STRAIT AND ULLOA CHANNEL

Mercator Projection
Scale 1:40,000 at Lat. 55°15'
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

TIDAL INFORMATION

Place Name	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
		feet	feet	feet	feet
North Pass W Ent.	(55°12'N/ 132°56'W)	12.9	12.1	1.4	-4.0
South Pass	(55°10'N/ 132°52'W)	12.9	12.0	1.5	-4.0
Tlevak Narrows	(55°16'N/ 133°07'W)	11.7	10.8	1.5	-4.0
Sea Otter Harbor	(55°07'N/ 133°10'W)	9.7	8.9	1.3	-4.0

(803)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical
Al alternating
B black
Bn beacon
C can
DIA diaphone
F fixed
Fl flashing
G green
IQ interrupted quick
Iso isophase
LT HO lighthouse
M nautical mile
m minutes
MICRO TR microwave tower
Mkr marker
Mo morse code
N nun
OBSC obscured
Oc occulting
Or orange
Q quick
R red
Ra Ref radar reflector
R Bn radiobeacon
R TR radio tower
Rot rotating
s seconds
SEC sector
St M statute miles
VQ very quick
W white
WHIS whistle
Y yellow

Bottom characteristics:

Blds boulders
bk broken
Cy clay
Co coral
G gravel
Grs grass
gy gray
h hard
M mud
Oys oysters
Rk rock
S sand
so soft
Sh shells
sy sticky

Miscellaneous:

AUTH authorized
ED existence doubtful
Obstn obstruction
PA position approximate
PD position doubtful
Rep reported
Subm submerged

21 Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the U.S. Coast Guard.

Joins page 11

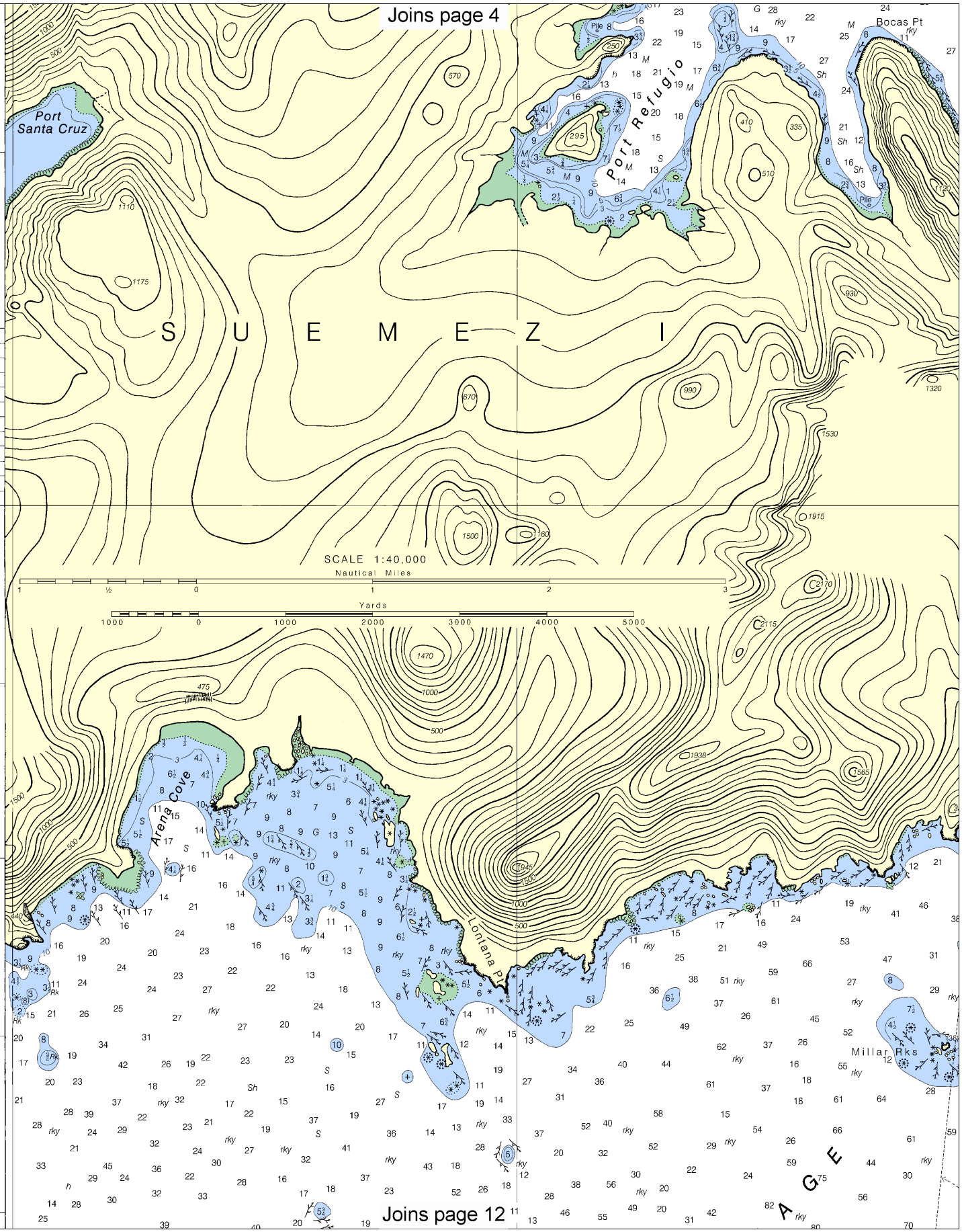
UTION
ges or defects in aids to
dicated on this chart. See
ers.

AL INFORMATION
ast Pilot 8 for important
ation.

NAVIGATION
ast Guard Light List for
ation concerning aids to

RNING
ner will not rely solely on
vigation, particularly on
S. Coast Guard Light List
for details.

This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 4812 11/27/2012,
NGA Weekly Notice to Mariners: 4812 12/1/2012,
Canadian Coast Guard Notice to Mariners: 0912 9/28/2012.



8

Note: Chart grid lines are aligned with true north.

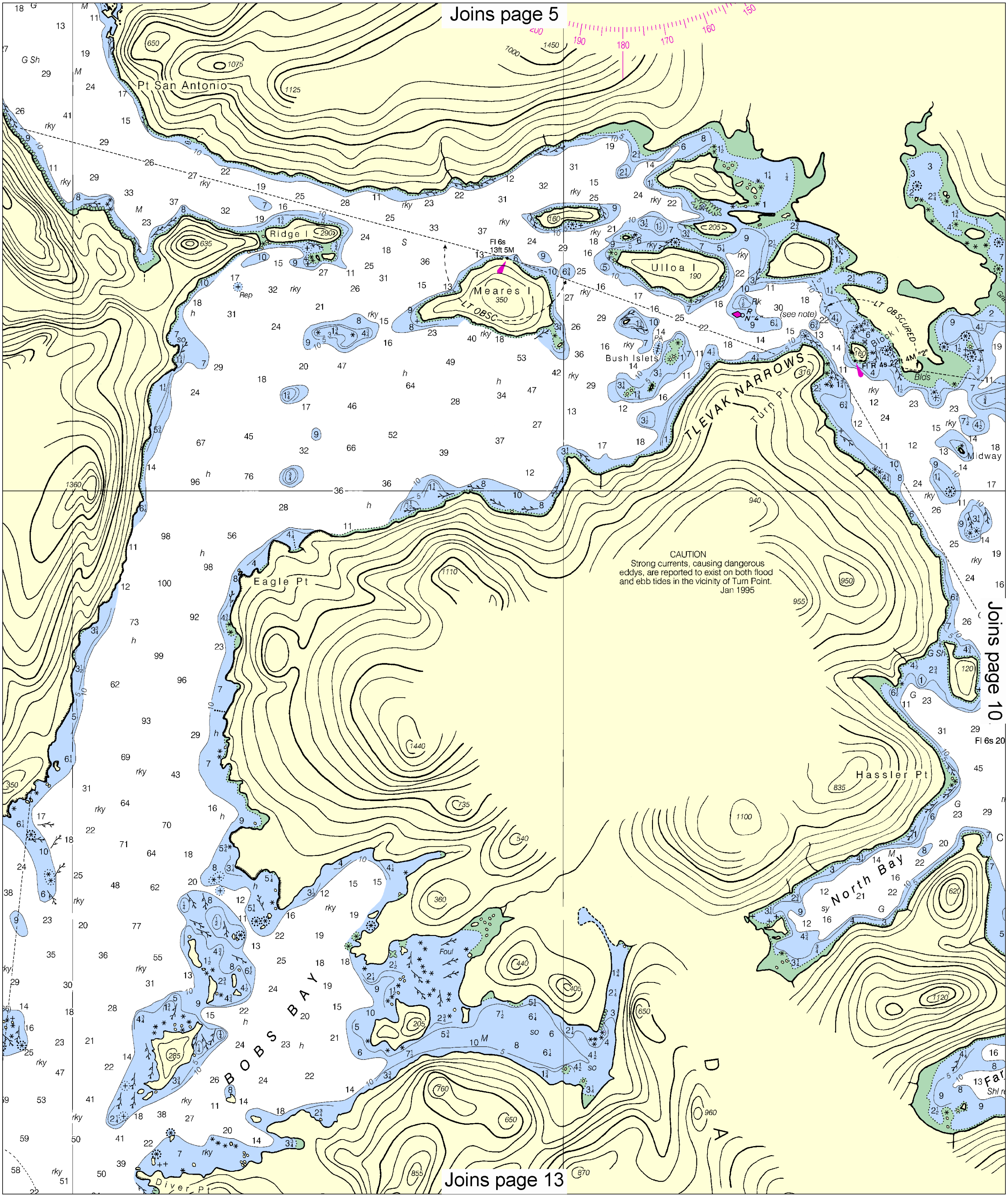
Printed at reduced scale.

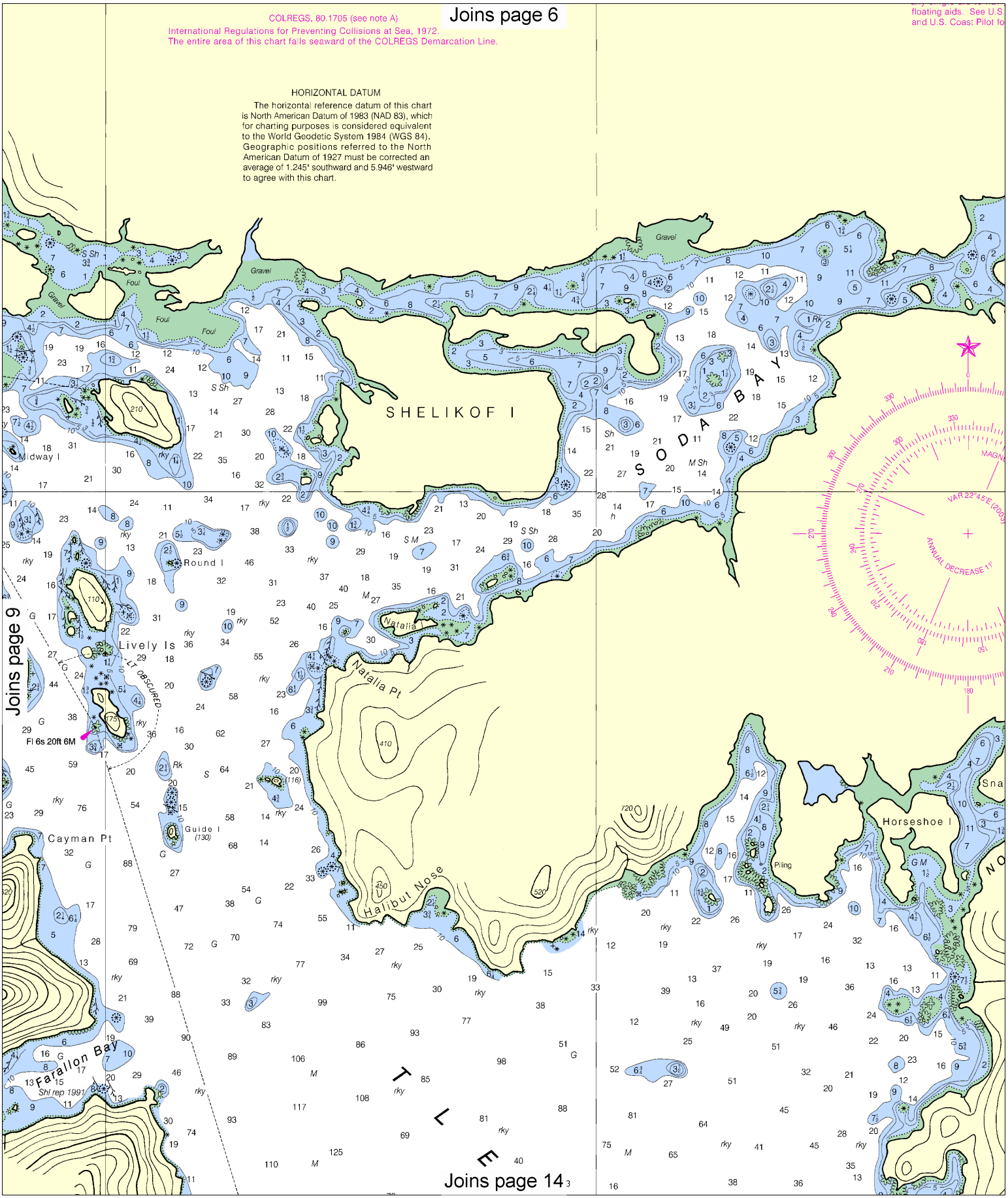
~~SCALE 1:40,000~~

Nautical Miles

Yards

See Note on page 5.


Joins page 5
Pt San Antonio
Ridge I
Meares I
LT OBSC
Fl 6s
13ft 5M
Ulloa I
Bush Islets
(see note)
LT OBSCURED
Block I
Fl R 4s 22ft 4M "2"
Bldg
TLEVAK NARROWS
Turn Pt
Midway
Eagle Pt
CAUTION
Strong currents, causing dangerous eddys, are reported to exist on both flood and ebb tides in the vicinity of Turn Point.
Jan 1995
Joins page 10
Hassler Pt
Fl 6s 20
North Bay
BOBS BAY
Foul
D A
Diver Pt
Joins page 13



10

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

See Note on page 5.

S. Coast Guard Light List for details.

Cy clay Grs grass M mud S sar

Joins page 7

Miscellaneous:

AUTH authorized Obstn obstruction PD position doubtful Subm submerged
ED existence doubtful PA position approximate Rep reported

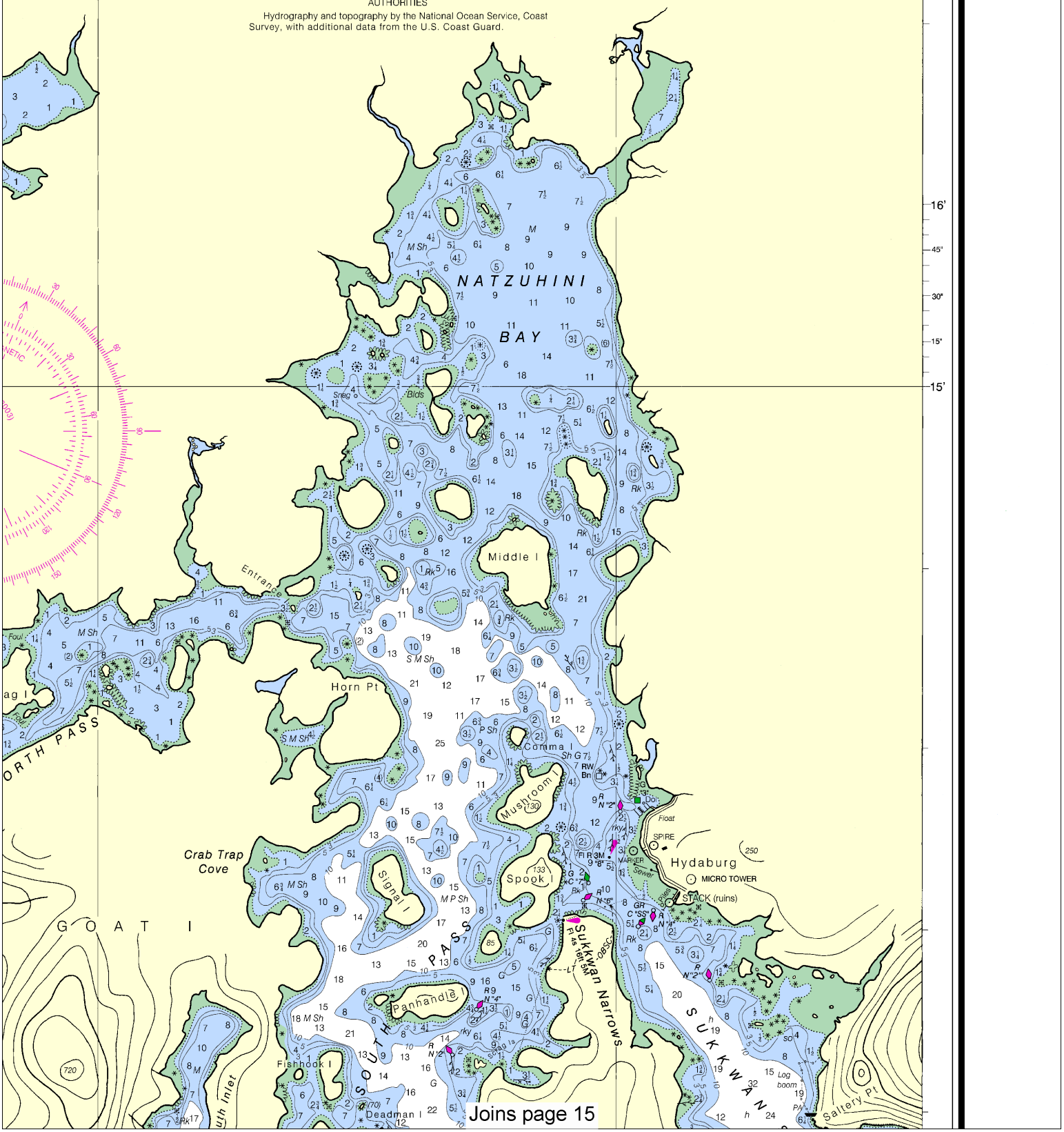
21 Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

HEIGHTS

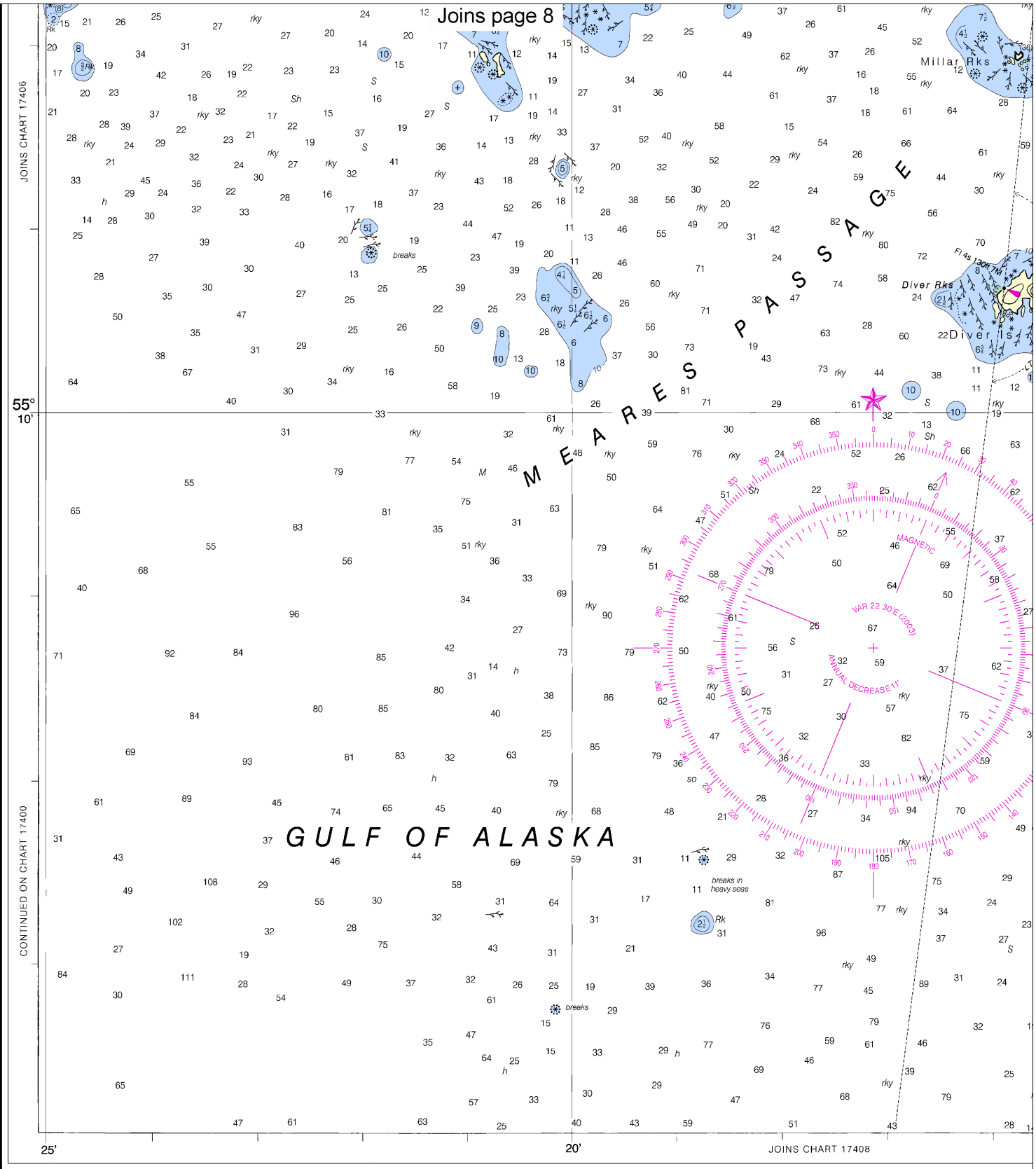
Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the U.S. Coast Guard.



Joins page 15



15th Ed., Nov. / 03 ■ Corrected through NM Nov. 22/03
Corrected through LNM Nov. 11/03

17407

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

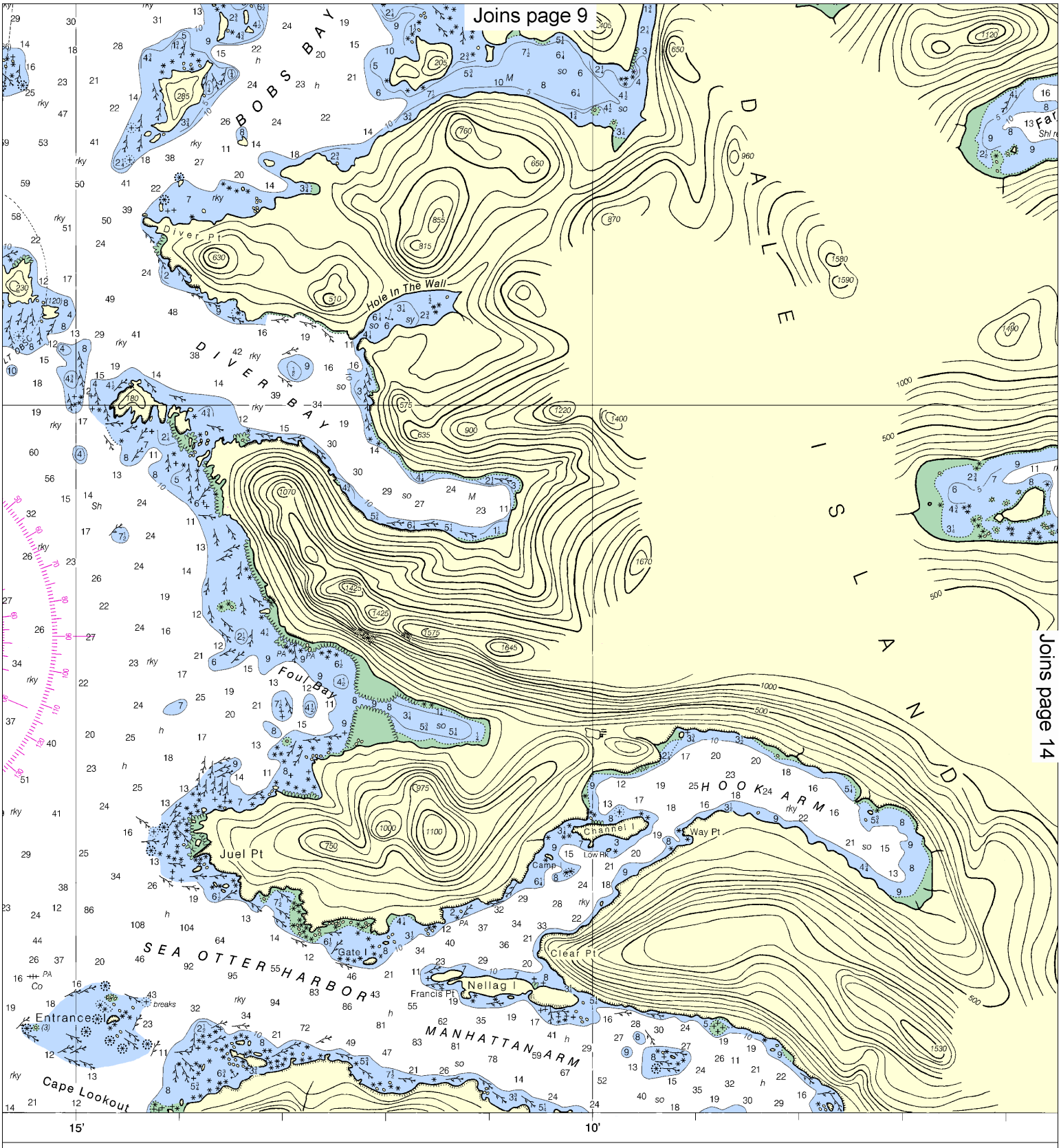
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

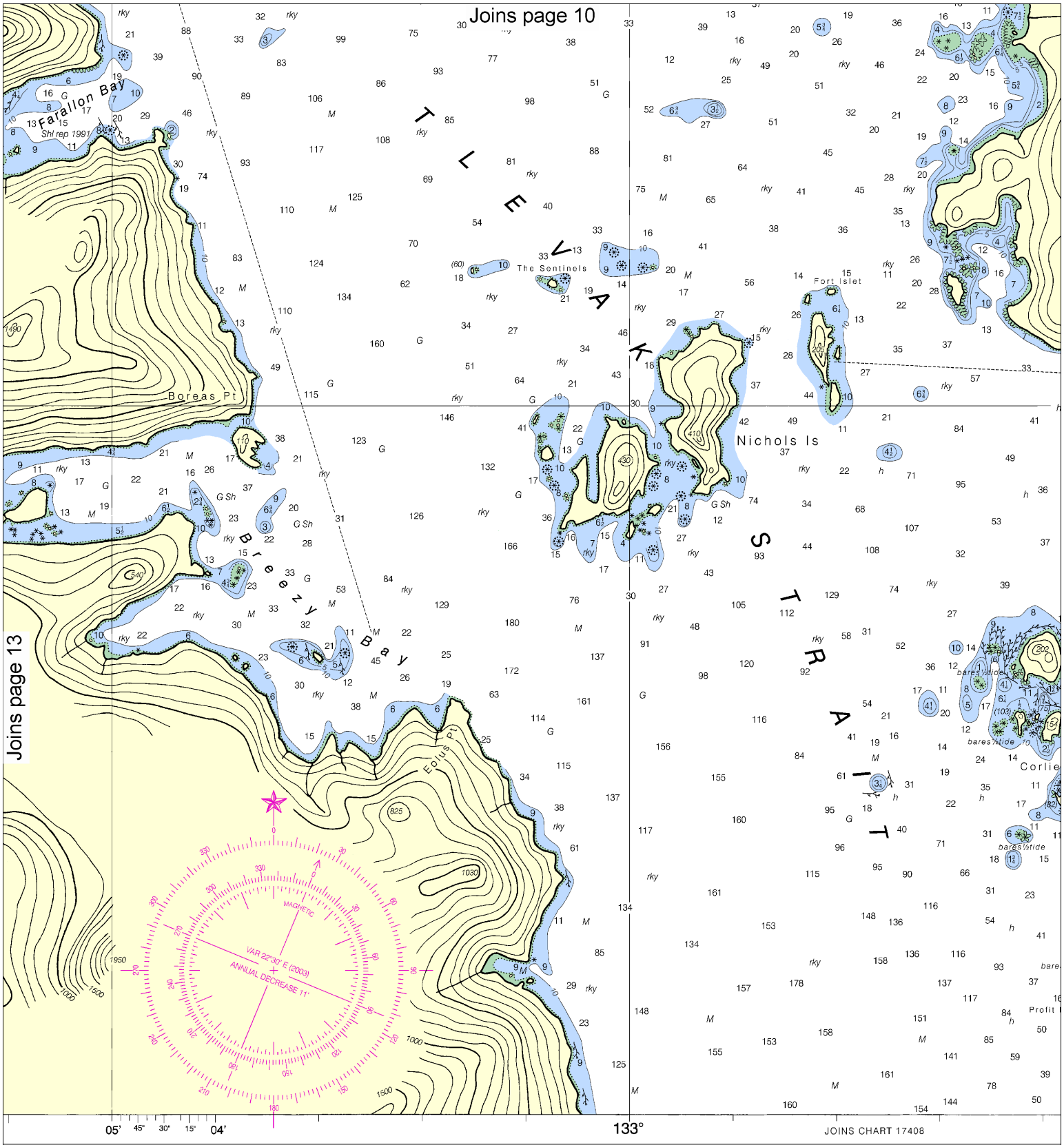
Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.



SOUNDINGS IN FATHOMS

Published at Washington, D
U.S. DEPARTMENT OF COM
NATIONAL OCEANIC AND ATMOSPHERIC
NATIONAL OCEAN SERVI
COAST SURVEY



ashington, D.C.
T OF COMMERCE
IOSPHERIC ADMINISTRATION
EAN SERVICE
URVEY

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://NauticalCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com.

FATHOMS	1	2	3	4		
FEET	6	12	18	24	3	
METERS	1	2	3	4	5	6	7	8

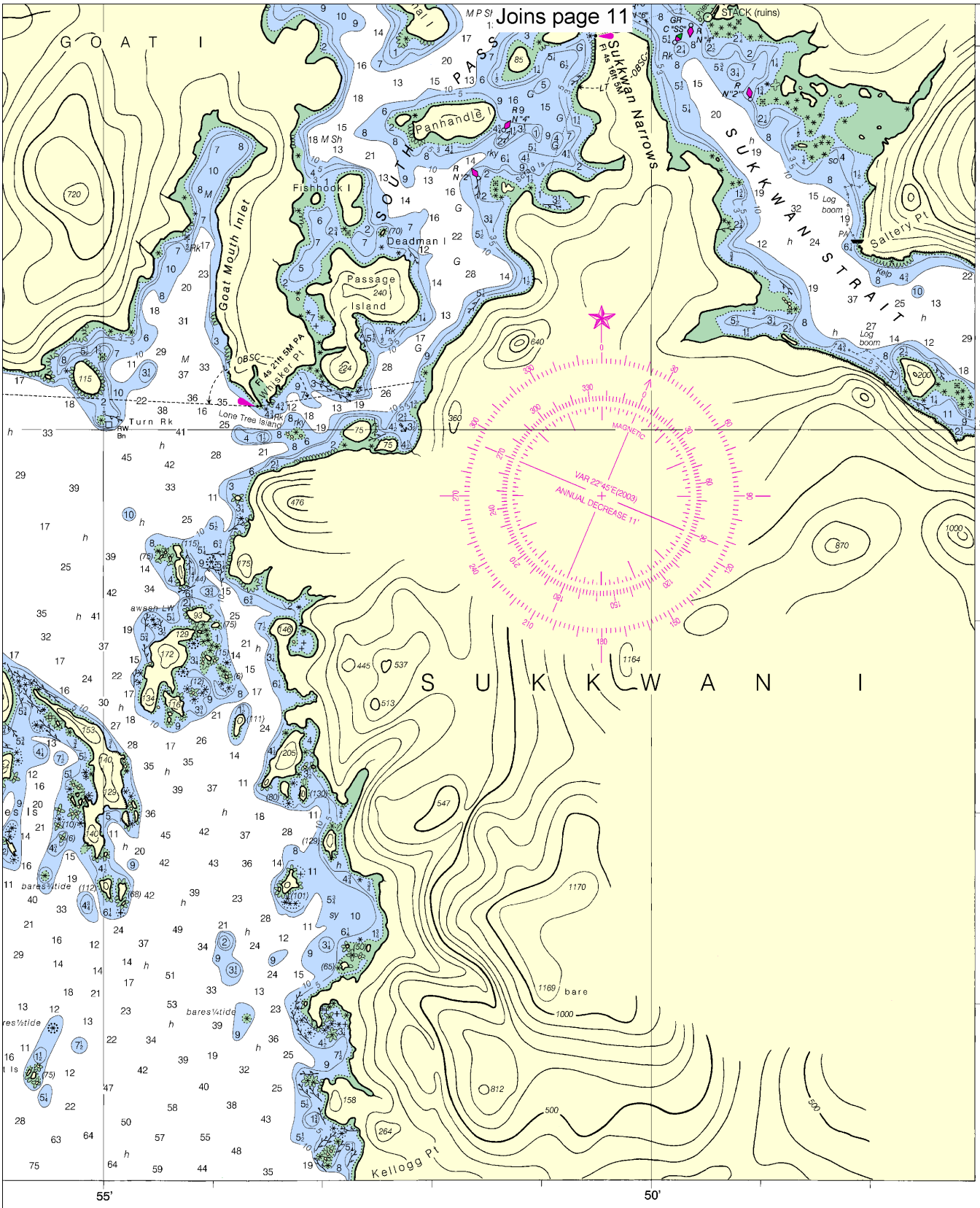
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.



Northern Part of Tlevak Strait and Ulloa Channel

SOUNDINGS IN FATHOMS - SCALE 1:40,000

17407

ED NO 15

NSN 7642014011454

NIMA REFERENCE NO.17XHA17407

15

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

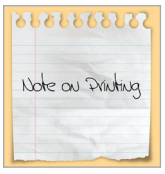
All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References

Nautical chart related products and information	—	**http://www.nauticalcharts.noaa.gov**
Online chart viewer	—	**http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html**
Report a chart discrepancy	—	**http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx**
Chart and chart related inquiries and comments	—	**http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs**
Chart updates (LNM and NM corrections)	—	**http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html**
Coast Pilot online	—	**http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm**
Tides and Currents	—	**http://tidesandcurrents.noaa.gov**
Marine Forecasts	—	**http://www.nws.noaa.gov/om/marine/home.htm**
National Data Buoy Center	—	**http://www.ndbc.noaa.gov/**
NowCoast web portal for coastal conditions	—	**http://www.nowcoast.noaa.gov/**
National Weather Service	—	**http://www.weather.gov/**
National Hurrican Center	—	**http://www.nhc.noaa.gov/**
Pacific Tsunami Warning Center	—	**http://ptwc.weather.gov/**
Contact Us	—	**http://www.nauticalcharts.noaa.gov/staff/contact.htm**

twitter —— For the latest news from Coast Survey, follow **@nauticalcharts**



This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

NOAA's Office of Coast Survey The Nation's Chartmaker